

Abstract

The present invention provides an electret nonwoven web useable in a variety of applications. The nonwoven web is prepared from continuous fibers and once formed, a binder composition is applied to the nonwoven web. Generally the binder composition is sprayed on or impregnated into the nonwoven web and the binder composition is cured forming a nonwoven web/binder composite material. After the binder composition is cured, the composite is electret charged. The application of the binder composition to the nonwoven web provides the nonwoven web with stiffness and with characteristics such that it can be pleated and such pleats can be retained without the use of a supporting substrate.

This makes the electret charged nonwoven web highly suitable and cost effective for filter media by eliminating the need for laminating the media to a supporting member.